Climate Action CIMARY 2020



Prime Minister of Buganda kingdom Charles Mayiga having a chit chat with UNEP's Africa climate change coordinator Dr Richard Munang after succesful deliberations on improving cassava value chain

Uganda just like the globe shares a vision of a climate resilient, globally competitive Uganda, creating enterprise opportunities for all, ensuring there is food in every home and more money in more pockets. All across the continent share in this vision of a globally competitive country and Africa, and Uganda's actions will drive this vision, as it is of much interest to them. **Economic growth is fundamental to Uganda as any hitch** in the economy is felt by every sector of the economy, ministry and departments in the country. There is therefore a need to safeguard and enhance economic growth through maximizing on the cassava value chain using climate resilient actions.

Uganda National Bureau of Standards (UNBS) operationalising climate action Market Incentives for Cassava value chain - Buganda Kingdom





When Ecosystem Based Adaptation For Food Security Assembly (EBAFOSA) visited the Buganda kingdom in June 2019, there was some preparatory groundwork established under the pillars and structure for sustainably industrialising the cassava value chain and enterprise development. A unique aspect of this structure is its systems approach. Where it was said, that while planting and expanding availability and accessibility of quality cassava to local farmers was good, it was not enough.

Cassava needed to be linked to clean power for value addition and development of different product lines that can fetch a market. It was also said that the producers needed to be supported to affordably finance the clean energy solutions – the solar dryers. It was established value addition is not enough, the value-added products had to be marketed to tap lucrative niche markets – leveraging on the Uganda National Bureau of Standards (UNBS). The icing on the cake was to have local youth skilled to tap the enterprise opportunities generated by this cascade of strategic actions – especially development and fabrication

of solar dryers as well as marketing of the different product lines

This is to be established through the timeless "Bulungi Bwa Nsi" principle – where the skills, talents, resourcefulness and ongoing enterprise of the Buganda people will be the primary form of capital. What is called Innovative Volunteerism. This has covered opportunities along the entire chain – from on farm production level, to processing & value addition powered by clean energy, to promotion and connection to markets as well as cross-cutting areas of financing and training & capacity enhancement for enterprise development especially for the youth.

We have established an entire ecosystem of cassava sustainable industrialisation for accelerated inclusive socioeconomic transformation in Buganda. At the on-farm level, the objective is to multiply availability of high-quality cassava planting materials for redistribution to the local farmers.

Cumulatively, the combination of the highquality cassava cuttings where an up to 400% increase in cassava yields in the kingdom is projected. with the solar dryers to preserve this harvest and the quality control by UNBS is projected to provide over 200metric tonnes of high quality steady supply of cassava for the breweries.

Quality cassava seedlings have been multiplied for supply to local farmers. This is the NAROCASS1 variety which while maintaining the cassava natural composition, has proven to be high yielding and more tolerant to moisture stress and diseases yielding up to 400% more. Over 25ha of multiplication site, which is the source of this high yielding planting material for local farmers has been cultivated. Distribution of this planting material for free to cassava farmers across the Kingdom will start soon. 400 farmers will receive planting materials in Season 2020A. From January till May 2020. The distribution to farmers for free cassava cuttings will take place in season 2020A. First half of the year. The targeted farmers will be identified through the clustering approach working with the Buganda county and sub county administration as well as the ministers office

In working out this approach care will be given to mapping and tracing planted materials through an outreach program that have started being built. There has been discussions to this approach with cassava experts and they think it is unique and will rapidly support the multiplication process. At the midstream value addition level, the aim is to decentralise affordable value addition down to the producers. For this, a superior solar dryer design, made from locally available material and local manpower to make it affordable has been prototyped, tested and is now under mass-

production. This dryer has proven to be 200% cheaper than other dryers in the market. It has proven able to dry cassava up to 30times faster than traditional open sun drying, while also ensuring hygiene as the product being dried is covered and not exposed to the elements as is the case with traditional open sun & air drying.

So far, 20 solar dryers have been produced and will be distributed in two streams. The first stream will be through what we are calling a "corporate approach".



Local farmers walking through a cassava farm to demonstrate the quality of harvests and sharing best farming practises.

Based on the initial test runs, cassava farmers have been able to reduce moisture upto the recommended threshold of 12% critical to prevent aflatoxin attacks



Minister of Lands, Environment & Cooperatives, Mariam Nkalubo (left), UNEP climate change coordinator for Africa, Dr. Richard Munang (centre) and prime minister of Buganda Charles Mayiga (right)









Top Left ,discussion on operationalizing Buganda cassava value chain, top right EBAFOSA Uganda president Mr. Patrick Luganda taking down notes while listening to presentation on operationalizing Buganda cassava value chain., bottom left is Dr Richard Munang UNEP's climate change coordinator for Africa inspecting dried cassava from a fabricator, finally bottom right is the display of various cassava products by innovative volunteerism actors

Solar drying centres are already being established which will be open to cassava farmers as well as those of other value chains to dry their produce. The second stream is the individualised approach, where farmers who may not be able to access the drying centres will have the dryers decentralised to them. Based on initial test runs, cassava farmers have been able to reduce moisture up to the recommended threshold of 12% critical to prevent aflatoxin attacks. They have reduced losses by up to 72% and save up to \$42per acre. Based on this initial test, we project that cassava farmers can recoup up to \$9,476 per season that is currently lost due to rotting

The dryers are produced under an incubation centre called the Africa Youth Agro-Industrialization Academy (AYAIAcademy) that is technically backstopped by the UNEP. 58 youth from Buganda have been trained to develop these dryers and are now the lead designers and fabricators of quality dryers made from locally available material, to make them affordable to local cassava farmers. Product development and improvement is a continuous process. Through AYAIAcademy, the solar dryer design is being improved to ensure moisture reduction thresholds of below 12%, ensure faster drying and further lower development costs. As of 10th January, testing of a newer design prototype that uses less wood, is lighter and more effective got underway. All this is being accomplished by local youth who will then be absorbed under EBAFOSA to

be producing and decentralising these dryers to cassava and other value chain actors.

On financing of these dryers, engagement of local microfinances to develop risk sharing facility is ongoing and EBAFOSA is working closely with the minister of cooperatives and look forward to a breakthrough soon. There have been meetings with 3 cooperatives and discussions in establishing an Innovative Financing facility. The aim of this facility is to de-risk financing of operations along the entire cassava chain. Where willing cooperatives and micro-finance institutions will be indemnified of all financial default risk - up to \$1200 each - in exchange for offering financing at below market rates. The dryers will form part of the collateral. This makes the investment in cassava value addition very affordable. This is however not the only dimension. Actors who may not be willing to use this facility will be supported through the structure of their cooperatives, with planting material and value addition so they can produce at no cost. Then once they harvest, they will be supported to market their produce. It is after they have been paid that part of these earning will be recouped to repay the dryers and cuttings.

These cassava value chain actors will also be supported through the EBAFOSA structure, to participate in cassava value addition.



This is a very clear potential for success for Uganda cassava value chain to drive the fabrication and product development that will unlock the climate, social, economic and enterprise benefits of cassava value chain in Uganda That will make Buganda kingdom, a shining example in Africa, of how climate action policies can ensure there is better standards in the cassava value chain and thus also improves revenues for government.

Register to become an Innovative volunteerism actor at: Registration link (Click) Join our continental platform of agro-industry actors and fill your GAP at: Registration link to join MeBAFOSA (Click)

